**WHAT IS CLAIMED IS:**

1. A power steering system comprising:

a hydraulic power cylinder that assists a steering force of a steering mechanism turning steered road wheels for steering;

a first hydraulic pressure supply means including a reversible pump relatively supplying hydraulic pressure to first and second hydraulic chambers of the hydraulic power cylinder via first and second fluid passages, associated with the respective hydraulic chambers, and an electric motor driving the reversible pump in a normal-rotational direction or in a reverse-rotational direction;

a steering-state detection means that detects a driver's steering state;

a control unit that outputs a command signal to the motor responsively to the driver's steering state detected by the steering-state detection means; and

a second hydraulic pressure supply means selectively supplying hydraulic pressure to either one of the first and second hydraulic chambers of the hydraulic power cylinder.

2. A power steering system as claimed in claim 1, which further comprises:

a failure detection means, which is provided to detect a failure in the first hydraulic pressure supply means.

3. A power steering system as claimed in claim 2, wherein:

the second hydraulic pressure supply means comes into operation, when the failure in the first hydraulic pressure supply means has been detected by the failure detection means.

4. A power steering system as claimed in claim 3, which further comprises:

third and fourth fluid passages provided to supply hydraulic pressure from the second hydraulic pressure supply means to the first and second hydraulic pressure chambers of the hydraulic power cylinder via the first and second fluid passages, and

a first fluid-passage directional control valve provided at a joined portion of the first and third fluid passages for establishing or blocking fluid communication between the first and third fluid passages; and

a second fluid-passage directional control valve provided at a joined portion of the second and fourth fluid passages for establishing or blocking fluid communication between the second and fourth fluid passages,

wherein, when the first hydraulic pressure supply means is operating normally, the first and second fluid-passage directional control valves operate to block fluid communication between the hydraulic power cylinder and the second hydraulic pressure supply means, and

wherein, when the failure in the first hydraulic pressure supply means has been detected by the failure detection means, the first and second fluid-passage directional control valves operate to establish fluid communication between the hydraulic power cylinder and the second hydraulic pressure supply means.

5. A power steering system as claimed in claim 3, wherein:

the second hydraulic pressure supply means is kept operative for a predetermined operating time by the control unit, and shifted to a stopped state by the control unit when the predetermined operating time has expired.

6. A power steering system as claimed in claim 3, wherein:

the second hydraulic pressure supply means is shifted to a stopped state by the control unit with a gradual reduction in a discharge of working fluid discharged from the second hydraulic pressure supply means.

7. A power steering system as claimed in claim 2, wherein:

the failure detection means detects the failure in the first hydraulic pressure supply means, based on a current value of electric current supplied to the motor.

8. A power steering system as claimed in claim 7, wherein:

the failure detection means detects the failure in the first hydraulic pressure supply means, based on the current value of electric current supplied to the motor, and a steering torque signal concerning steering torque, which is exerted on a steering shaft linked to the steering mechanism and detected by a steering torque detection means.

9. A power steering system as claimed in claim 2, wherein:

the failure detection means detects the failure in the first hydraulic pressure supply means, based on a motor speed of the motor.

10. A power steering system as claimed in claim 1, wherein:

a working-fluid discharge characteristic of the first hydraulic pressure supply means and a working-fluid discharge characteristic of the second hydraulic pressure supply means are set to differ from each other.

11. A power steering system as claimed in claim 1, which further comprises:

a steering shaft linked to the steering mechanism; and

a steering torque detection means that detects steering torque that is exerted on the steering shaft,

wherein only the first hydraulic pressure supply means is operated when the steering torque, detected by the steering torque detection means, is less than a predetermined value.

12. A power steering system as claimed in claim 1, wherein:

the second hydraulic pressure supply means comprises a hydraulic accumulator in which hydraulic pressure is stored by the reversible pump of the first hydraulic pressure supply means, a first switching valve that opens or closes the third fluid passage interconnecting the accumulator and the first hydraulic pressure chamber, and a second switching valve that opens or closes the fourth fluid passage interconnecting the accumulator and the second hydraulic pressure chamber,

wherein, when the first hydraulic pressure supply means is operating normally, the control unit controls hydraulic pressure in each of the hydraulic pressure chambers by driving the reversible pump, and

wherein, when a failure in the first hydraulic pressure supply means occurs, the control unit controls valve operations of the first and second switching valves.

13. A control method of a power steering system employing a hydraulic power cylinder that assists a steering force of a steering mechanism turning steered road wheels for steering, a first hydraulic pressure supply means including a reversible pump relatively supplying hydraulic pressure to first and second hydraulic chambers of the hydraulic power cylinder via first and second fluid passages, associated with the respective hydraulic chambers, and an electric motor driving the reversible pump in a normal-rotational

direction or in a reverse-rotational direction, a steering-state detection means that detects a driver's steering state, a control unit that outputs a command signal to the motor responsively to the driver's steering state detected by the steering-state detection means, and a second hydraulic pressure supply means selectively supplying hydraulic pressure to either one of the first and second hydraulic chambers of the hydraulic power cylinder, the method characterized in that:

when a failure in the first hydraulic pressure supply means has been detected by a failure detection means, the control unit initiates an operative step of the second hydraulic pressure supply means so that the second hydraulic pressure supply means comes into operation.

14. A control method of a power steering system as claimed in claim 13, further comprising:

providing third and fourth fluid passages to selectively supply hydraulic pressure from the second hydraulic pressure supply means to either one of the first and second hydraulic pressure chambers;

disposing a first fluid-passage directional control valve in the third fluid passage, and disposing a second fluid-passage directional control valve in the fourth fluid passage;

controlling valve operations of the first and second fluid-passage directional control valves, so that the first and second fluid-passage directional control valves block fluid communication between the hydraulic power cylinder and the second hydraulic pressure supply means, when the first hydraulic pressure supply means is operating normally; and

controlling the valve operations of the first and second fluid-passage directional control valves, so that the first

and second fluid-passage directional control valves establish fluid communication between the hydraulic power cylinder and the second hydraulic pressure supply means, when the failure in the first hydraulic pressure supply means has been detected by the failure detection means.

15. A control method of a power steering system as claimed in claim 13, further comprising:

providing an electromagnetic clutch between the reversible pump and the motor; and

uncoupling the reversible pump from the motor via the electromagnetic clutch, when the failure in the first hydraulic pressure supply means has been detected by the failure detection means.

16. A control method of a power steering system as claimed in claim 13, wherein:

the failure detection means comprises:

a current-value detection step that detects a current value of electric current supplied to the motor; and

a current-value based failure diagnostic step that determines that the first hydraulic pressure supply means is failed when the current value of electric current detected by the current-value detection step is out of a predetermined range.

17. A control method of a power steering system as claimed in claim 13, wherein:

the failure detection means comprises:

a motor-speed detection step that detects or estimates a motor speed of the motor; and

a motor-speed based failure diagnostic step that determines that the first hydraulic pressure supply means is

failed when the motor speed detected by the motor-speed detection step is out of a predetermined range.

18. A control method of a power steering system as claimed in claim 13, further comprising:

providing a steering torque detection means that detects steering torque exerted on a steering shaft linked to the steering mechanism,

wherein the failure detection means comprises:

a current-value detection step that detects a current value of electric current supplied to the motor;

a steering-torque detection step that estimates the steering torque based on a detected value of the steering torque detection means; and

a comparative determination step that compares the current value with a threshold current value and compares the steering torque with a threshold torque value, and determines, based on comparison results, whether the first hydraulic pressure supply means is failed.

19. A control method of a power steering system as claimed in claim 13, wherein:

the operative step of the second hydraulic pressure supply means comprises a step at which the operation of the second hydraulic pressure supply means is stopped after the second hydraulic pressure supply means has been operated for a predetermined operating time.

20. A control method of a power steering system, as claimed in claim 19, wherein:

the operative step of the second hydraulic pressure supply means comprises:

a step that operates the second hydraulic pressure supply means for a predetermined operating time;

a step that gradually reduces a discharge of hydraulic working fluid discharged from the second hydraulic pressure supply means, from a time when the predetermined operating time has expired; and

a step that stops the operation of the second hydraulic pressure supply means after the predetermined operating time has expired.